I. Overview of Shadow Banking

A. INTRODUCTION. The world’s financial system has been changing rapidly. A central feature is disintermediation: the removal of banks as financial intermediaries. The term “shadow banking” is often used as shorthand to refer to the disintermediated financial system—effectively all forms of financing that are not bank intermediated.

1. Examples. Shadow banking encompasses structured finance and securitization, in which financing is indirectly raised by special-purpose entities (“SPEs”). It also includes financing and financial services provided by other non-bank financial intermediaries—such as finance companies,

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hedge funds, money-market mutual funds, REITs, securities lenders engaging in repo lending, and investment banks.

2. Impact. The amount of non-bank intermediated (i.e., disintermediated) credit already “rivals” the amount of bank-intermediated credit to households and businesses. The trajectory of disintermediation suggests that disintermediated credit will soon, if it does not already, exceed bank-intermediated credit: the gross amount of disintermediated credit was estimated to be nearly $20 trillion in March 2008, but was estimated at three times that level—$60 trillion—in December 2011.

3. Risks and Regulation. The paramount concern posed by the disintermediated financial system is that it can, if left unregulated, pose systemic risks to the financial system. Disintermediation makes it much more likely, for example, that market participants will engage in profitable but risky transactions, although doing so could externalize harm—including systemic harm—onto other market participants and even ordinary citizens. Notwithstanding that, however, disintermediation can increase financial

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3 Although real estate investment trusts (REITs) have long preceded what is generally known as shadow banking, I refer to them because they are, technically, SPEs that issue securities and use the proceeds to invest in real estate properties.


5 Id. at 4-5.


efficiency.\textsuperscript{9} The challenge will be to determine how shadow banking should be regulated to try to maximize its efficiencies while minimizing its risks.\textsuperscript{10}

B. HOW WILL SHADOW BANKING IMPACT THE REAL ESTATE SECTOR?

Securitization, hedge funds, and REITs are especially relevant to the real estate sector.

1. Securitization is important both to the housing recovery and to commercial real estate generally, because it is a critical means of enabling mortgage-loan originators to regain liquidity to make new loans (which I will discuss as a means of “funding regeneration”\textsuperscript{11}). A common political response to the recent financial crisis, however, has been to restrict securitization.

2. Hedge funds are becoming increasingly important as originators of mortgage loans, as I’ll discuss.\textsuperscript{12}

3. REITs might also be regarded as part of shadow banking.\textsuperscript{13} Long concentrated in U.S. markets, they are becoming increasingly important in global real estate finance. But REITs are not significant real estate loan originators or funding regenerators.

\textsuperscript{9} Steven L. Schwarcz, Inaugural Address: Regulating Shadow Banking, 31 BOSTON UNIVERSITY REVIEW OF BANKING & FINANCIAL LAW 619, 624-25 (2012) (explaining why shadow banking “may well constitute a public good by helping to achieve efficiencies”).
\textsuperscript{10} Id. at 641.
\textsuperscript{11} See infra Part III.
\textsuperscript{12} See infra Part II.A.2.
\textsuperscript{13} See supra note 3.
II. Funding Origination

A. Mortgage-Loan Origination

1. Bank Origination. Banks are currently observing very conservative real estate lending standards. Regulation, such as Basel III, may well motivate banks to continue observing conservative real estate lending standards.

2. Non-Bank Origination. When banks observe conservative lending standards voluntarily or pursuant to regulation that applies only to banks (qua banks), that provides an opportunity for non-banks to begin competing in real estate loan origination. For example, hedge funds—directly or through vehicles (SPEs) that issue securities to raise financing—are now originating a significant amount of commercial real estate lending in the United States. I also understand that hedge funds are actively engaged in acquiring residential mortgage-origination and servicing businesses, which they expect to be increasingly profitable.


   (i) Governments worldwide are increasingly considering restricting residential mortgage-loan origination standards. Overly restrictive origination standards could, of course, impede the housing recovery.
(ii) In the United States, for example, mortgage lending will be strongly driven by what is known as the Qualified Mortgage (QM) definition for making mortgage loans. This definitional limitation is mandated by § 1411 of the Dodd-Frank Act, which amends the Truth in Lending Act to prohibit a lender from making a residential mortgage loan unless the lender “makes a reasonable and good faith determination . . . that the consumer has a reasonable ability to repay the loan.”

Until the definition is finalized, parties cannot estimate credit cost or availability. This contributes to the conundrum that although today’s low interest rates and home prices should make housing very affordable, many ordinary families can’t qualify for mortgage loans. Furthermore, the final QM definition will strongly impact the availability and cost of credit because borrowers will have strong incentives to litigate mortgage loans that, in retrospect, arguably fall outside that definition. Under proposed law, for example, an ability-to-repay violation would be a defense against foreclosure; and a lender losing an ability-to-repay lawsuit becomes subject to “enhanced damages,” which include liability for actual damages, double finance charges, and all costs. Attempts to finalize the QM definition thus face an inherent tension between protecting borrowers while ensuring reasonable credit availability.

One way to help resolve that tension would be to allow a definitional alternative option for a QM loan, based on the loan-to-value ratio. For

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14 In April 2011, the Federal Reserve Board delegated its issuance authority to its Consumer Financial Protection Bureau (CFPB), which issued a proposed rule amending Regulation Z. Under that proposal, a QM loan would require that several specific underwriting factors be considered and verified.
example, there could be a non-exclusive regulatory safe harbor if the collateral value is at least 1.X times the loan principal. This would be somewhat analogous to Regulation U of the Federal Reserve, requiring margin loans secured by margin stock to be collateralized at least 2:1.\textsuperscript{15} I am not suggesting, however, that real estate loans need as much overcollateralization as margin loans. I understand that residential mortgage loans in Canada, for example, are keyed to only an 80% maximum loan-to-value ratio.

(iii) The Financial Stability Oversight Council (FSOC) may be considering further proactively regulating mortgage origination in the United States. Also, there are worldwide regulatory efforts to impose restrictions and safety nets for mortgage loans.

(iv) Government may have other roles in mortgage origination—subject to the caveat that any government role would, of course, affect private market incentives. Should governments consider, for example, providing mortgage-loan guarantees, perhaps for early mortgage years, much as they do for project financing (especially during the risky construction phase)? Should governments consider making credit available to mortgage-loan originators to enhance the liquidity of key real estate markets?\textsuperscript{16} Also, given the very long-term nature of typical mortgage loans, what will be the impact of Basel III’s aversion to short-term “wholesale” funding to finance loan/asset books? Will mortgage loans be made for

\textsuperscript{15} It is only somewhat analogous because, unlike Regulation U, the definitional alternative option for a QM loan would be non-exclusive.
\textsuperscript{16} In that regard, compare the role of Federal Home Loan Banks in the United States.
shorter periods? That may be done already in certain countries, and that could help to mitigate lending risk (although it increases borrower risk).

B. ALTERNATIVES TO MORTGAGE LOANS

1. Alternative Forms of Access. To what extent will restricted loan origination motivate alternative forms of “access”—such as leasing and other non-ownership rights to use real property? Leasing is important in some non-U.S. markets; and since the financial crisis, leasing of residential real estate has become increasing important in the U.S.

2. Rental Payments as Financial Assets. As alternative forms of access grow, one can envision regenerating funding through securitization (see below). Lease rental payments, for example, are “financial assets,” and at least theoretically all types of financial assets can be securitized.

III. Funding Regeneration

A. SECURITIZATION

Recall that securitization is important to the housing recovery as well as to commercial real estate because it is a critical means of enabling mortgage-loan originators to regain liquidity to make new loans.17 For example, a mortgage-loan originator that makes $X of mortgage loans can securitize the loans and regain close to $X of liquidity to make additional

17 See supra note 11 and accompanying text.
loans. And the additional loans can likewise be securitized, enabling the mortgage-loan originator to make further additional loans. The cycle can continue, perhaps enabling a mortgage-loan originator starting with $X to make, for example, three or four times that amount of loans per year.

1. GSE Securitization. Government-sponsored enterprise (GSE) securitization is currently the primary domestic source of funding regeneration, through monetization of mortgage loans. To some extent, this is driven by regulation: the Dodd-Frank Act, for example, imposes a 5% minimum unhedged risk-retention (“skin in the game”) requirement for non-GSE mortgage-loan securitizations.\(^\text{18}\) To that extent, GSE securitization is incongruous because it is inconsistent with the goal of the Obama administration’s white paper on housing finance, of phasing out the GSEs and enticing more “private capital” into the system.

To some extent, however, GSE securitization reflects a post-financial crisis move to safety.\(^\text{19}\) As later discussed, however, there may be a trend in today’s financial markets toward increasing tolerance for risk.\(^\text{20}\)

\(^{18}\) Risk Retention ties into the Qualified Residential Mortgage (QRM) rule because the risk-retention requirement does not apply to securitizing QRMs. Six federal agencies are jointly responsible for issuing this rule. QRMs are to be a higher quality subset of Qualified Mortgage (QM) loans. On March 11, 2011, the six agencies proposed a very tight QRM definition. There has been no subsequent release as to when a final rule will be issued.

\(^{19}\) Thus, Ginnie Mae, which is wholly-owned by the U.S. government, has grown even more important as compared to Fannie Mae and Freddie Mac. Foreign investors often prefer Ginnie Mae securities because they are backed by a full U.S. government guarantee. Even though the yields on Ginnie Mae securities are lower than on Fannie and Freddie securities, investors are concerned about Fannie and Freddie because they are private entities (albeit “federally chartered” or “government sponsored”), having only a line of credit to the U.S. Treasury.

\(^{20}\) See infra Part IV.A.2..
2. **Non-GSE Securitization.** It is hard to predict the future of the residential mortgage-backed securities (RMBS) market. However, until that market is weaned from the GSEs, the level of residential real estate financing may be limited.

**B. COVERED BONDS**

1. Covered bonds can also serve, similar to securitization, as a way to monetize mortgage loans.\(^{21}\) Some covered bond regimes are statutory, some are contractual. Statutory regimes are generally safer for investors because they provide legislative safe harbors. The United States does not yet have a statutory covered bond law.

2. The relationships and differences between securitization and covered bonds are complex. Although covered bonds are sometimes viewed by investors as preferable to securitization, covered bonds are more likely than securitization to harm unsecured creditors of mortgage-loan originators.\(^{22}\)

**IV. Controlling Future Real Estate Financing Risk**


\(^{22}\) *See id.* at 586.
No matter how funding origination and funding regeneration are regulated, there are likely to be future financial failures. That is because shadow banking can trigger three types of market failures, which regulation can only address imperfectly: information failure, agency failure, and responsibility failure (often addressed as externalities).

A. INFORMATION FAILURE

1. *Asymmetric Information*. By increasing complexity, shadow banking can cause information failure by making financial transactions and products more difficult to disclose and understand. In the recent financial crisis, for example, it appears that neither investors nor even underwriters always fully understood and appreciated the potential consequences of complex, highly-leveraged ABS CDO securities, which were largely payable from securities that themselves were payable from underlying mortgage loans.

2. *Bounded Rationality*. Although sometimes categorized separately, this can be viewed as a subset of information failure.

(i) We have difficulty, for example, appreciating unlikely events that, if they occur, could have devastating consequences.\(^{23}\) In this context, note the parallel between subprime margin loans as a causal factor in the Great Depression (when the rising stock market collapsed, many of these loans became undercollateralized), and subprime mortgage loans as a causal factor

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in the recent financial crisis (when the rising housing market collapsed, many of these loans likewise became undercollateralized). In both cases, observers critically under-appreciated the systemic consequences of a precipitous drop—unprecedented in then-recent history—in collateral value.

(ii) We also have short memories. Although in late 2008/early 2009, no investor would buy anything that did not have a government guarantee, there is a trend in today’s financial markets toward increasing tolerance for risk. To obtain higher returns, investors—especially hedge funds—are now buying AAA/Aaa subprime auto and A-rated prime auto paper and are looking at other asset classes. We now appear to have a vibrant CLO market for non-mortgage asset classes (which looks in all respects like the old CDO market with just a different name). Even CMBS is improving, though RMBS is still uncertain.

Short memories, however, may not fully explain risk cycles and today’s market’s increasing tolerance for risk. Other explanations might include a swing back to normalcy from the earlier overreaction, and a competitive need of investors to get high returns.

B. AGENCY FAILURE

24 E-mail from Stuart Litwin, partner, Mayer Brown LLP, to the author (Sep. 10, 2012).
25 Id.
26 Litwin also observes that governments worldwide have made it an economic policy to keep interest rates low to stimulate their economies and economic troubles have dramatically increased the demand for low-risk government securities. Short-term, AAA/Aaa-rated, ABS has a somewhat greater return than—and has become a reasonable substitute for—other low risk investments. Id.
1. By increasing complexity, shadow banking can increase the potential for agency failure (meaning principal-agent failure, as opposed to GSE “agency” failure).

2. The biggest problem may not be the traditional agency conflict between a firm’s owners and senior managers but, instead, the conflict between a firm’s senior managers and its secondary managers (such as vice presidents and analysts). Because secondary managers are typically paid on a short-term basis, including yearly bonuses, and they often move from firm to firm, their interests do not necessarily align with the long-term interests of their firms. Even more apropos to shadow banking, secondary managers may well have a better technical understanding of complex investments and transactions, so they can—and in the recent financial crisis, often likely did—recommend investments and transactions that generate high returns, and thus high bonuses to them, even though the investments and transactions pose real long-term risks to their firms.

3. Agency failure is, theoretically, one of the easiest types of failure to try to manage by regulation. But to the extent managers can move to jobs in different countries, effective regulation will require international governmental cooperation.

C. RESPONSIBILITY FAILURE

28 Id. (discussing how secondary managers used VaR to accomplish this).
29 Id. at 465-69 (discussing possible solutions, including aligning compensation incentives).
1. Shadow banking also makes it much more likely that market participants will engage in profitable but risky transactions, although doing so could externalize harm—including systemic harm—onto other market participants and even ordinary citizens. Economists would see this as fitting into the traditional market-failure category of “externalities.”

2. “Externalities,” however, is a counterintuitive and confusing term for a market-failure category because it conflates cause and effect. Externalities are consequences, not causes, of market failure. We need to focus more on the cause of those externalities, which I will call responsibility failure.³⁰

3. For example, limited liability is an important source of responsibility failure that can lead to externalities. Because investors in firms are not personally liable for liabilities of their firms, the interests of investors may conflict with the interests of their firms and, more importantly for externalities, with the interests of third parties harmed by their firms.³¹

4. By facilitating decentralization, shadow banking makes this form of responsibility failure much more likely. The relatively small firms that operate in the disintermediated financial system are often managed directly


³¹ This is not an overlap with agency failure because agency failure goes to the principal-agent relationship whereas conflicts resulting from limited liability go to the conflict between managers of firms and society.
by their primary investors. Because they typically divide up a significant share of the firm’s profits, those managers have strong incentives to take risks that could generate large profits. Yet if a risky action exposes their firm to significant liability for externalized harm, those managers would not be liable if the firm cannot pay that liability. They therefore have an incentive to take outsized risks with their firms, for the chance of outsized gains to themselves, notwithstanding the potential systemic impact that could result from their firm’s failure.32

5. This is radically unlike the management incentives in large firms, such as traditional banks, in which the senior managers tend to share only indirectly in profits, such as through stock options. Those managers may also be more invested in maintaining their jobs. They therefore are less motivated to take actions that risk the firm.

32 To some extent this would be balanced, however, by the failure of a relatively small firm being less likely to trigger systemic consequences than the failure of a larger firm.